

***QinetiQ***

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# Emerging Threats

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A presentation to: RUSI

27 September 2001

# Emerging Threats

Context for this presentation

- Threats to a UK peacekeeping operation
- Identify technologies which will have an impact
- Examine some emerging threats

# Definition

We say a threat is a function based on motivation and capability:

$$threat \sim f(motivation, capability)$$

# Emerging Threats

## Dependencies

- Co-operation with allies
- Interaction with NGO's, UN etc
- Use of the Internet & e-commerce
- Dependence on civil systems
- Interdependence between suppliers
- Media engagement

=> many non-military targets & vulnerabilities



Emerging Threats

# Technologies

*Technology marches on...*

Non-esoteric technology provides a capability

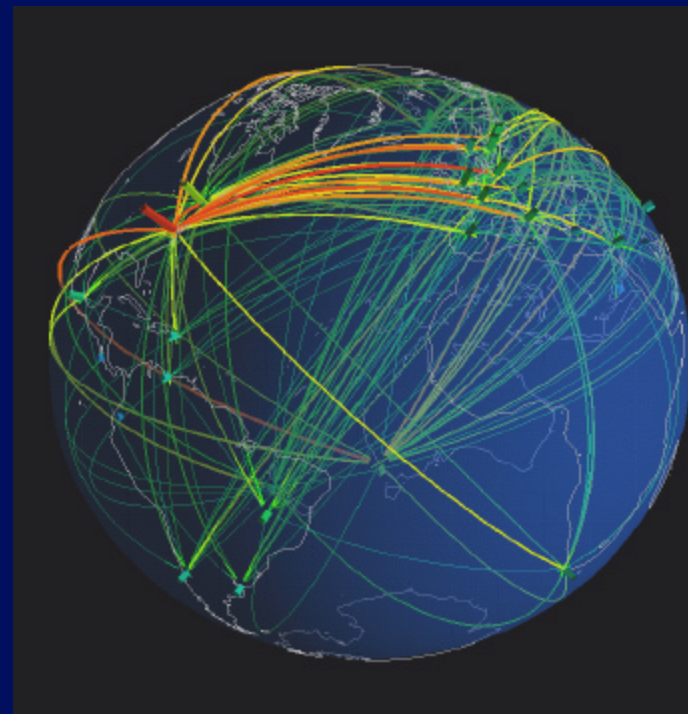
- Satellite phones
- Satellite imagery
- Internet service expansion
- Wireless Area Protocols (WAP)
- Free/disposable mobile phones

Emerging Threats

# Technologies

Why are these technologies important?

- affordable
- access to information & services
- share information
- form trans-national communities
  - virtual communities
- WAP, mobile phones and Internet services provide *anonymity*





## Emerging Threats

# The actors

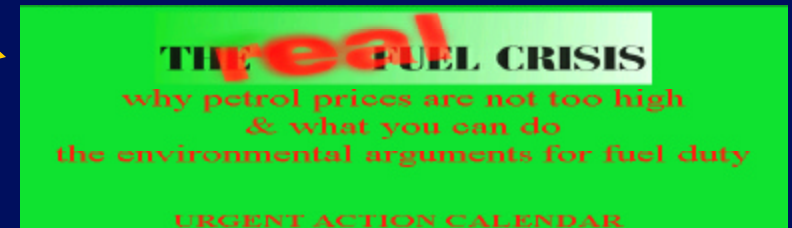
- State Actors
- Terrorists
- Disaffected Individuals
- Criminals
- Gangs/Militia



## Emerging Threats

# The actors

- Single Issue Movements
  - National to Global
- Law abiding to dangerous
  - extra-parliamentary/pressure groups
  - political pressure/economic
  - activism/threatening



## Emerging Threats

# Single Issue Movements

- Increasing trend & difficult to predict
- Technology provides vehicle to orchestrate effort
- Duration of a movement depends upon the cause
- Motivations of supporters are complex
- Trans-national support
- Trend to promote direct action
- Use of media

## Emerging Threats

# The threats to an operation

- Spread of dis-information
  - Lose the war of words & public support
- Attacks
  - directly against MOD infrastructure
  - against interdependencies in common supply & telecomms chain
  - threaten companies who are associated with an operation
  - identify and threaten key individuals
  - distributed & trans-national
  - denial of service attacks
- Fragmented organisation - makes countermeasures difficult
- Promotion of direct action ~hacktivism
- Fast tempo of events

## Emerging Threats

# Conclusions

- The evolution of single issue movements groups pose a threat to military operations. Their formation, expansion and duration can be difficult to predict; They are spawned within complex social-technical systems.
- Attacks on civil infrastructure & personnel could undermine operations
- Indicators and warnings are required to alert us to their development as few, if any, exist.
- How do we identify the 'catalysts' that transform a situation
- Media engagement is required as a countermeasure
- The threat posed by such groups will grow especially as 'activism' is promoted.